Retaining Cocaine-Abusing Women in a Therapeutic Community: The Effect of a Child Live-In Program

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ABSTRACT

A clinical trial examined whether retention of cocaine-abusing women in a therapeutic community can be improved by permitting their children to live with them during treatment. Fifty-three women were randomly assigned to either the standard community condition (n = 22), in which children were placed with the best available caretaker, or the demonstration condition (n = 31), in which one or two of the children lived with their mother in the community. Survival analysis distributions indicated that demonstration women remained in treatment significantly longer than standard treatment women. (Mean length of stay was 300.4 days vs 101.9 days, respectively.) (*Am J Public Health.* 1995;85: 1149–1152)

Introduction

The current national cocaine epidemic has confronted substance abuse treatment programs with increased numbers of a new type of client: the young cocaine-abusing woman. Many of these women have a cocaine-exposed infant and additional children.[1–6] A large number of them enter treatment to reduce or avoid legal penalties associated with drug-related offenses, and treatment is often required if they wish to retain or regain custody of their children.

But cocaine abusers are difficult to engage and retain in treatment.[7] Clinicians at the authors' therapeutic community observed that cocaine-dependent women drop out of treatment early, often stating that their children need them at home. Unfortunately, these early dropouts too often relapse to cocaine use with disastrous consequences for themselves and their children.

It has been especially difficult to retain women in residential substance abuse programs.[8] Child care has been identified as a major reason.[9,10] Yet successful therapeutic community rehabilitation traditionally requires separation of substance abuser from family sometimes for 18 months or longer. This separation of mother and child clashes with strong arguments for maintaining close bonds between the two during the child's early developmental stages.

Two therapeutic communities, Odyssey House in New York City[11] and Amity, Inc of Arizona,[9] provided the authors with a testable strategy to improve the retention of cocaine-abusing women. These therapeutic communities pioneered live-in programs for the children of women entering their facilities. Although these efforts were not controlled experiments, the Amity experience suggested an increased length of stay in the Tucson therapeutic community, while the Odyssey House experience suggested improved outcomes in posttreatment telephone interviews.

To investigate these possibilities more rigorously, we conducted a controlled evaluation within one therapeutic community. A specific aim was to test whether length of stay might increase if women were permitted to live with their children in the therapeutic environment. The site for the study was the Operation PAR therapeutic community, one of the largest in the southeastern United States, with facilities for 120 adults. The program closely resembles the "generic" long-term therapeutic community described by De Leon and Rosenthal,[12] for which the projected length of stay approximates 18 months.

Methods

To be eligible for this study, women admitted to the PAR therapeutic community had to be at least 18 years of age, with legal authority or permission to bring to the community one or two children aged 10 years or younger. All participants were required to meet *DSM-III-R* criteria for a cocaine abuse or dependence syndrome, and to have sufficiently serious substance-related problems to warrant intensive therapeutic community treatment.

To graduate from the program, women were expected to demonstrate an extended period of abstinence from substance use; intrapersonal, interpersonal, parenting, and time management skills

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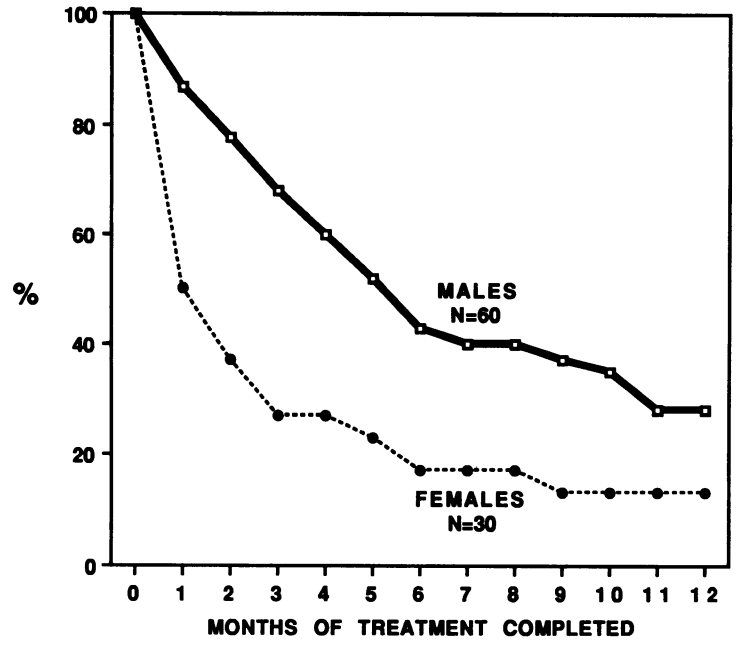
This paper was accepted April 4, 1995.



Note. L (n = 90, 1) = 12.49; $P < .0005$.

FIGURE 1—The retention of male and female residents admitted to the study therapeutic community with cocaine as primary drug of abuse, 1988.

TABLE 1—Characteristics of Standard and Demonstration Treatment Women in the Study Therapeutic Community

	Treatment Women		
	Standard (n = 22)	Demonstration (n = 31)	*P*
Age, mean years (range)	26.7 (19–36)	27.8 (18–44)	>.5
Race, no. (%)			>.4
African American	18 (82)	25 (81)	
Other[a]	4 (18)	6 (19)	
Education, mean years (range)	11.0 (8–14)	10.7 (7–16)	>.7
Marital status, no. (%)			>.5
Married	2 (9)	2 (6)	
Separated	2 (9)	4 (13)	
Divorced	4 (18)	2 (6)	
Never married	14 (64)	23 (74)	
Children, mean no. (range)	3.0 (1–6)	3.3 (1–8)	>.5
Children ≤ 10 years, mean no. (range)	2.5 (1–5)	2.8 (1–7)	>.3
Previous treatments, no. (%)			>.6
None	5 (23)	6 (19)	
One	6 (27)	11 (35)	
Two	7 (32)	7 (23)	
Three or more	4 (18)	7 (23)	
Referral source, no. (%)			>.7
Volunteer/family	6 (27)	6 (19)	
Child protection	12 (55)	18 (58)	
Criminal justice	4 (18)	7 (23)	

[a]Includes two of Hispanic origin and eight Caucasians.

necessary to function successfully in the larger community; healthy peer and extended family relationships; establishment of reliable health and child care; affordable housing; and a job or enrollment in a training program.

Therapeutic community clinicians screened 75 applicants for motivation and suitability, and referred 64 for research screening; 53 met study eligibility criteria and were admitted to the community without children between April 1990 and October 1992. Within 7 days, research staff administered the Structured Clinical Interview for *DSM-III-R*,[13] which confirmed the presence of cocaine dependence in 52 women and of cocaine abuse in 1; all 53 of these women are referred to here as "cocaine abusers." A lottery method was used to assign the women at random to the standard (no child) or demonstration (live-in child) conditions: subjects selected a "TC" (therapeutic community) or "TC-Plus" card from a two-card deck shuffled blindly by research staff. Children not admitted were placed or remained in the best available alternative.

Within the PAR community, all study women shared the same communal dining room and counselors. Efforts were made to provide the same treatment experience for demonstration and standard community women, with the exception of child care to be described.

Standard community women (n = 22) received the usual therapeutic community services, including the parenting skills classes and women's issue groups that were started in 1989. These women shared dormitory sleeping arrangements for 12 to 15 residents on the main campus. Their children could visit three times per week at specified times but could not live on the campus.

Demonstration women (n = 31) were allowed to have one or two children reside with them in 1 of 14 cottages in PAR Village, which was constructed on the campus. Each cottage housed two to three women with children, who shared the living space, including a common living room and kitchenette. On weekdays, children were in the PAR Village day care center or local school. Demonstration women were with their children in evenings and on weekends, as well as during 3 hours of day care center activities per week. The treatment plan for these women included one or more goals related to the children in residence.

Data on retention were analyzed with survival analysis methods.[14] The

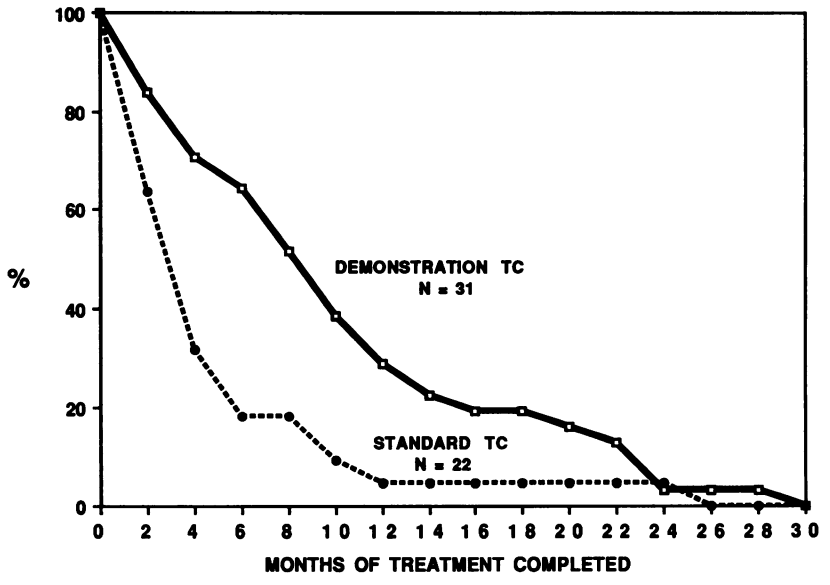
Lee-Desu statistic (L) was used to compare survival distributions for the two groups[15]; chi-square and t-test statistics were used as aids for interpreting other relationships.

Results

To clarify length-of-stay distributions in this therapeutic community prior to the study, we retrieved administrative data on admissions in 1988, the year before our experiment began. These data document the different length-of-stay distributions for cocaine-abusing men (n = 60) vs women (n = 30). In this therapeutic community, women had poorer retention in treatment than men (Figure 1; $L = 12.49$, $P < .0005$).

During the experiment, randomization created comparable distributions on background characteristics for demonstration and standard community women, as depicted in Table 1 (all $P > .3$). Nonetheless, the length-of-stay experiences of these two groups differed as expected (Figure 2; $L = 9.94$, $P < .005$). After 3 months, 77% of the demonstration women remained residents, compared with 45% of the standard treatment women; after 6 months, the corresponding values were 65% vs 18%; and after 12 months, 29% vs 5% (Figure 2). By August 1993, after all subjects had left the therapeutic community, length of stay was found to be greater for demonstration women (mean = 300.4 days, SD = 242.3) than for standard treatment women (mean = 101.9 days, SD = 93.7; $t = 2.83$, $P < .05$). To present a more representative picture of the sample, one standard treatment subject who stayed for 750 days was omitted from this analysis.

These study data can be understood more completely by considering that there were often delays associated with bringing children into PAR Village. By design, there was a 1-week delay after admitting the mother, during which time study eligibility criteria were assessed, baseline data were collected, and random assignment was made. Some children were admitted immediately thereafter, but in most instances there were additional delays to complete child custody procedures, resolve family-related issues, or verify a woman's capacity to manage child care while participating in treatment. Nevertheless, for 58% of the demonstration women, mother and child were living together at the therapeutic community within 16 days of the mother's admission; for 81%, the delay was less than 1 month.



Note. L (n = 53, 1) = 9.94; $P < .005$.

FIGURE 2—The retention of cocaine-abusing demonstration and standard treatment women in the study therapeutic community.

Five demonstration women left the program before the child arrived, all but one doing so when the child's arrival was imminent. The survival analysis included data on these five demonstration women even though they never lived with a child in the therapeutic community. This approach to analysis respects the randomly assigned treatment condition; the differences between survival distributions would have been more pronounced if these women had been excluded from the analysis.

Discussion

This evaluation found that retention in treatment for cocaine-abusing women who were allowed to live with one or two children in the therapeutic community was improved over that for women whose children lived outside the community and visited no more than three times per week, in accordance with the program's standard practice. Evidence of a retention-enhancing effect was most pronounced during the initial 4 months of treatment, and it is noted that five of the demonstration women dropped out of treatment when arrival of the children had been delayed for administrative reasons. This finding is consistent with previous nonexperimental literature describing a positive relation between retention in treatment and provision of child care accommodations in other therapeutic communities that serve substance-abusing women.[9,11,16]

The observed difference was not a consequence of imbalance in staff decisions to expel community residents for cause (e.g., repeated noncompliance). Three (14%) of the standard community women and four (13%) of the demonstration women were expelled from the community by staff. Half of the demonstration women (n = 16) left treatment of their own accord, citing an "impasse in treatment" compared with only a third of the standard community women (n = 8); eight demonstration women left early, stating they had "received enough treatment," compared with only one standard community woman; none of the demonstration women cited "worry about a child's welfare" when leaving early, whereas six of the standard community women did; and three demonstration women and four standard community women did not give any reasons for leaving.

Length of stay for women assigned to the standard therapeutic community condition was somewhat better than we had predicted on the basis of retention data for cocaine-abusing women admitted to the community in 1988, before this experiment began (Figure 1 vs Figure 2).

Assuming existence of this difference, we can speculate that it might reflect a change in procedures or emphasis within child protection agencies. During a period of heightened local concern about maternal drug use in Pinellas County,[3] women admitted to this program might have felt more agency pressure to stay in treatment. Alternative explanations include possible different distributions of unknown prognostic variables for women admitted in 1988 compared with women admitted later, and the possible beneficial impact of parenting and women's issue groups that were made available to all women in the therapeutic community since 1989.

This study involved women who abused cocaine, but they share a dilemma with women entering long-term therapeutic communities who abuse other substances. Because most therapeutic communities lack child care facilities, women typically must transfer child care responsibility to others. This separation can occur at a crucial stage in the mother–child relationship. The live-in model developed as a demonstration condition at PAR Village addresses this dilemma. The cost per child is roughly half the daily cost of the woman.

Permitting cocaine-abusing women to live with their children in a therapeutic community appears to prolong the retention of these women in treatment. Such a provision could strengthen important mother–child bonds while improving post-treatment outcomes, given that the length of stay in substance abuse treatment has been found to be the most consistent predictor of positive outcome.[17–19] □

Acknowledgments

This project received support from the National Institute on Drug Abuse (R18DA06369) and the Center for Substance Abuse Treatment (H86SP05699).

Data in this paper were presented at the College on Problems of Drug Dependence on June 13, 1993, in Toronto, Canada.

We thank Michael T. Brannick, PhD, for his advice on data analysis.

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